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ABSTRACT

This is a part of the Manitoba Mathematics Assessment Program 1987. Actual testing material and the manual for grade six are provided. The test (90 items) requires two 45-minute sessions. The manual describes general testing instructions, administration, scoring method and key, and format for recording the final test scores. (YP)

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ED301432

MATHEMATICS ASSESSMENT PROGRAM 1987

CURRICULUM DEVELOPMENT AND IMPLEMENTATION BRANCH

GRADE 6

U.S. DEPARTMENT OF EDUCATION
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MAY, 1987

Manitoba Education

SE 050 151

NAME _____ _____
(LAST) (FIRST)

SCHOOL _____

THERE ARE THREE EXAMPLES. TRY THEM AND PUT YOUR ANSWERS IN THE SAMPLE ANSWER SHEET BELOW. THE FIRST ONE IS DONE FOR YOU.

IF YOU WANT TO CHANGE AN ANSWER, ERASE THE FIRST ANSWER COMPLETELY AND BLACKEN IN THE CORRECT ONE.

194 The sum of 126 and 85 is

A) 101

B) 111

C) 211

D) 311

195 A square has _____ sides.

A) five

B) four

C) three

D) two

196 The <u>largest</u> of these number is

$1\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$ $1\frac{1}{2}$

A) $1\frac{1}{4}$

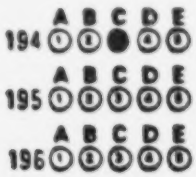
B) $\frac{1}{3}$

C) $\frac{1}{2}$

D) $\frac{1}{4}$

E) $1\frac{1}{2}$

SAMPLE ANSWER SHEET



STOP

PLEASE DO NOT TURN THE PAGE UNTIL ASKED TO DO SO.

PART A

1 The number 6043 is equivalent to

A) sixty thousand forty-three
B) six thousand forty-three
C) six hundred forty-three
D) six and forty-three hundredths

2 Three million, forty thousand, eighty-six, written as a numeral is

A) 340 086
B) 3 004 086
C) 3 400 086
D) 3 040 086

3 The number five hundred thirty and four hundredths may be written as

A) 534.00
B) 530.04
C) 530.004
D) 530 400

4 The place value of the digit 3 in the number 43 752 is

A) ten thousands
B) thousands
C) hundreds
D) ones

5 30 576 rounded off to the nearest hundred is

A) 30 500
B) 30 600
C) 31 000
D) 36 000

6 40 693 rounded off to the nearest thousand is

A) 40 000
B) 40 693
C) 40 700
D) 41 000

7 54.187 rounded off to the nearest hundredth is

A) 54.00
B) 54.18
C) 54.19
D) 54.20

8 6.037 rounded off to the nearest tenth is

A) 6.0
B) 6.1
C) 6.4
D) 6.04

9 37 038 is greater than

A) 37 308
B) 37 380
C) 37 030
D) 37 083

10 0.067 is greater than

A) 0.07
B) 0.076
C) 0.06
D) 0.10

11 Which of the following is **TRUE**?

A) 19 < 17
B) 31 > 36
C) 46 > 84
D) 53 < 56

12 3 + □ < 12

Which number(s) can go in the □ to make this number sentence **TRUE**?

A) Any number less than 9
B) 9
C) Any number greater than 9

13 The prime factors of 42 are

A) 2 and 3
B) 2 and 4
C) 2, 6, and 7
D) 2, 3, and 7

14 The common factors of 18 and 24 are

A) 1, 2, 3, and 6
B) 1, 2, 3, 6, and 8
C) 1, 2, 3, 6, and 9
D) 1, 3, and 6

15 The greatest common factor of 54 and 60 is

A) 6
B) 4
C) 3
D) 2

16 Which of the following represents a set of multiples of 7?

A) 7, 17, 27, 37 . . .
B) 7, 21, 27, 63 . . .
C) 7, 14, 28, 42, 57 . . .
D) 0, 7, 14, 21 . . .

17 If 821 + 14 = 14 + n, then n must be

A) 821
B) 835
C) 807
D) 14

18 If (16 + 3) + 5 = n + (3 + 5), then n must be

A) 5
B) 3
C) 16
D) 19

19 If (n x 35) x 2 = 63 x (35 x 2), then n must be

A) 70
B) 63
C) 35
D) 2

20 Which of the following is **TRUE**?

A) 60 x 1 = 601
B) 37 x 1 = 37
C) 23 x 1 = 123
D) 15 x 1 = $\frac{1}{15}$

21 **Add:**

```
   4 285
   2 326
 + 5 113
 -------
```

A) 11 614
B) 17 115
C) 1 614
D) 11 724

22 Which of the following columns should be used to do the addition 523 + 18 005 + 12?

A)
```
  523
18005
12
```

C)
```
18005
  523
   12
```

B)
```
  523
18005
12
```

D)
```
18005
  523
   12
```

23 By rounding off to the nearest 10, an estimate of 129 + 74 would be

A) 210
B) 203
C) 200
D) 190

24 Kevin has a summer job cutting lawns. For July his hours of work are shown in the table. The last 3 days of the month he went camping. How many hours did Kevin work during July?

week	hours
1	21
2	30
3	25
4	19

A) 95 hours
B) 92 hours
C) 85 hours
D) 98 hours

25 **Subtract:**

$$\begin{array}{r} 6072 \\ -\ \underline{3428} \end{array}$$

A) 3654
B) 3634
C) 3454
D) 2644

26 If 672 - 241 = $\square$, then which one of the following must be true?

A) $\square = 672 + 241$

B) $\square + 241 = 672$

C) $\square - 241 = 672$

D) $\square - 672 = 241$

27 By rounding off to the nearest 10, an estimate of 364 - 48 would be

A) 300
B) 310
C) 316
D) 320

28 347 x 100 =

A) 347 000
B) 34 700
C) 3470
D) 347

29 47 x 0 =

A) 0
B) 47
C) 470
D) 407

30 **Multiply:**

$$\begin{array}{r} 501 \\ \times\ 23 \\ \hline \end{array}$$

A) 1173
B) 2505
C) 10 353
D) 11 523

31 **Multiply:**

$$\begin{array}{r} 356 \\ \times\ 273 \\ \hline \end{array}$$

A) 737 988
B) 97 188
C) 10 680
D) 4272

32 By rounding off to the nearest 10, an estimate of 87 x 22 would be

A) 180
B) 1800
C) 1900
D) 1914

33 <u>Kilometre</u> means the same as

A) 1000 metres

B) 100 metres

C) 10 metres

D) $\frac{1}{10}$ of a metre

E) $\frac{1}{100}$ of a metre

34 Which unit should be used to measure how much a gasoline can holds?

A) Millilitre
B) Litre
C) Metre
D) Milligram
E) Gram

35 Mr. Jones wishes to paint the siding on his garage. In order to determine the area to be painted, Mr. Jones should estimate the size of his garage in

A) m^2
B) km^2
C) cm^2
D) mm^2

36 A rectangle has a length of 10 cm and a width of 4 cm. What is the perimeter of this rectangle?

A) 14 cm
B) 24 cm
C) 28 cm
D) 28 cm^2
E) 40 cm^2

37

About how long is the ballpoint pen above?

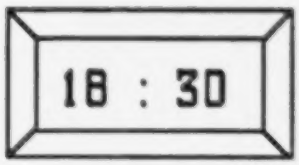
A) 15 m
B) 15 mm
C) 15 cm
D) 10 mm
E) 10 cm

38 I have a bag which holds 0.5 kg of jelly beans. How many grams is this?

A) 0.005 g
B) 0.05 g
C) 0.5 g
D) 50 g
E) 500 g

39 What time does this clock show?

A) Six-thirty in the evening
B) Six thirty in the morning
C) Eight-thirty in the evening
D) Eight-thirty in the morning

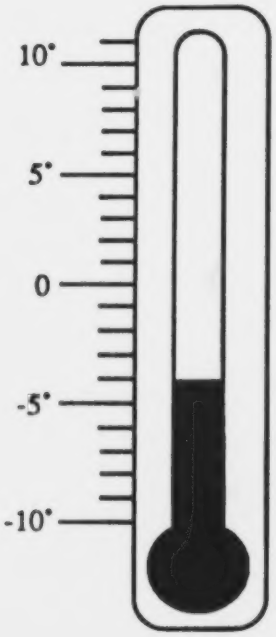


40 A square has a perimeter of 24 m. What is its area?

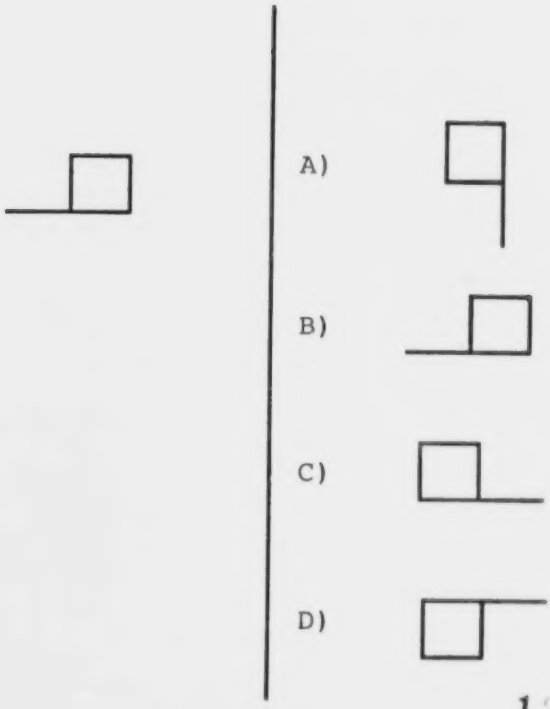
A) 36 m^2
B) 24 m^2
C) 16 m^2
D) 576 m^2
E) 144 m^2

41 What temperature does the thermometer below show?

A) 4°C
B) 0°C
C) -4°C
D) -5°C
E) -6°C

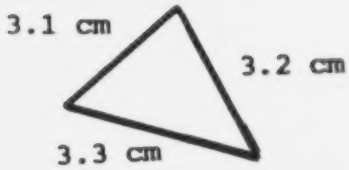


42 Which figure on the right is a flip image of the figure on the left?

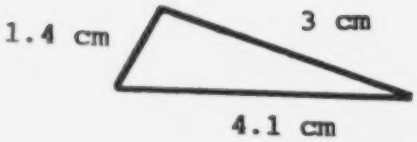


43 Which of the triangles shown below is an isosceles triangle?

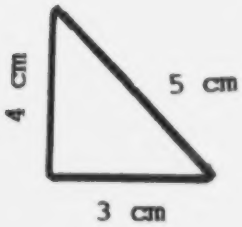
A)



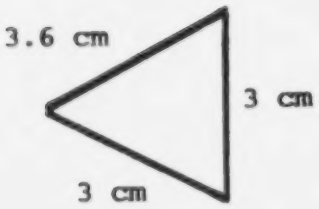
B)



C)



D)



44 Which line segment in the circle diagram is a diameter?

A) $\overline{AB}$

B) $\overline{AC}$

C) $\overline{AD}$

D) $\overline{BE}$

45 Which line segment in the circle diagram is a radius?

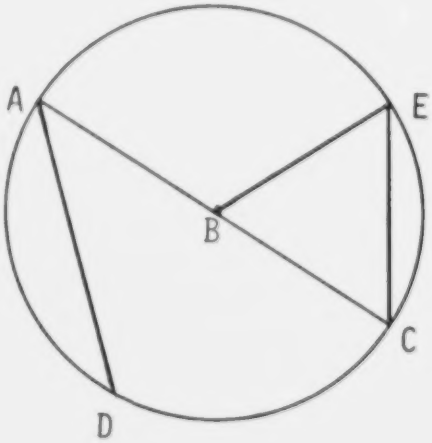
A) $\overline{AC}$

B) $\overline{AD}$

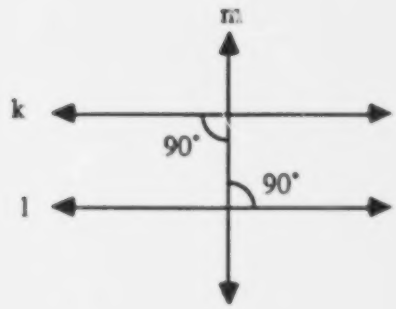
C) $\overline{BE}$

D) $\overline{CE}$

Use this circle with centre B to help you answer questions 44 and 45.



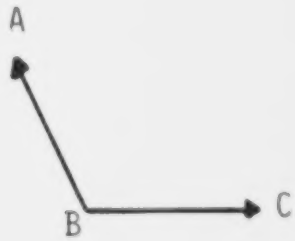
46



In the diagram above, lines k and l are

A) perpendicular
B) oblique
C) parallel
D) angular

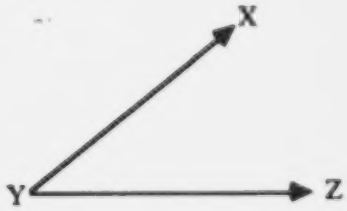
47 What type of angle is this?



A) Acute
B) Right
C) Obtuse
D) Wide

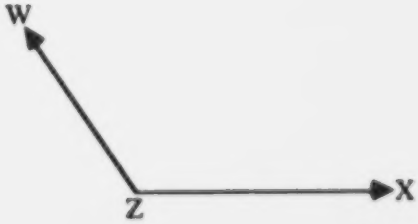
48 Which of the angles below is ∠ XWZ?

A)

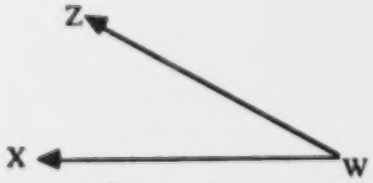


C)

B)

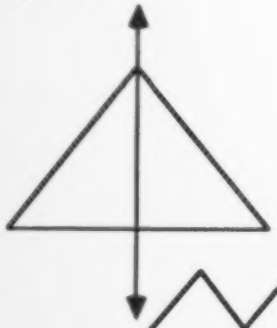


D)

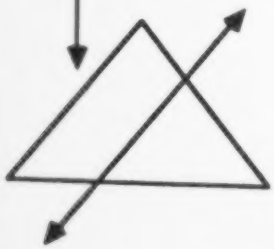


49 Which figure shows a line of symmetry for an equilateral triangle?

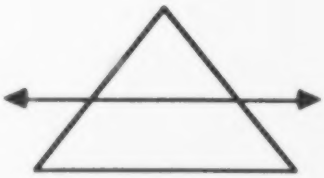
A)



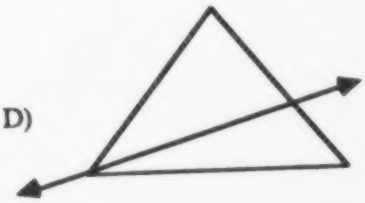
B)



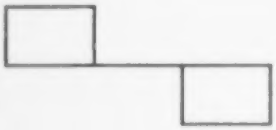
C)



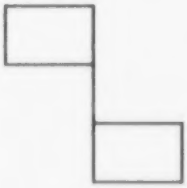
D)



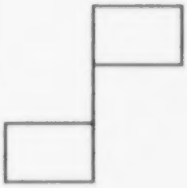
50 Which figure on the right is a turn (rotation) image of the figure on the left?



A)

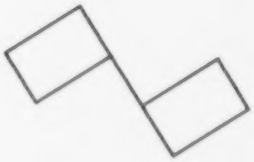


B)



C)

D)



STOP

DO NOT TURN THE PAGE. YOU MAY USE ANY REMAINING TIME TO CHECK BACK OVER YOUR WORK IN PART A.

PART B

BE SURE TO BEGIN IN SPACE 51 OF YOUR ANSWER SHEET.

51 **Divide:** $40\overline{)2800}$

A) 7
B) 70
C) 77
D) 700

52 $7 \div 0 =$

A) 0
B) 7
C) 1
D) cannot be done

53 **Divide:** $7\overline{)2205}$

A) 305
B) 315
C) 325
D) 335

54 **Divide:** $21\overline{)1202}$

A) 57 remainder 3
B) 57 remainder 5
C) 507 remainder 3
D) 55 remainder 7

55 In the division problem $26\overline{)12\ 248}$, if the answer is 471, remainder 2, then which of the following calculations is correct?

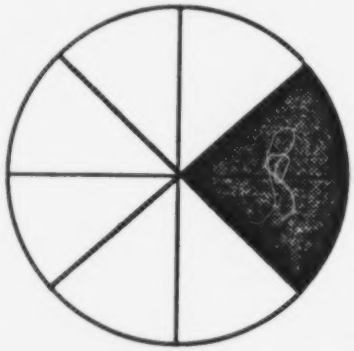
A) 26 x 471 = 12 248
B) 26 x 473 = 12 248
C) 28 x 471 = 12 248 + 2
D) 26 x 471 + 2 = 12 248
E) 12 248 + 26 + 2 = 471

56 Jane works in a grocery store together with her brother, Bob. Last week she worked Friday, 2 hours; Saturday, 4 hours; and Sunday, 3 hours. What was her average number of hours per day for the 3 days?

A) 1
B) 2
C) 3
D) 4

57 What portion of the circle is shaded

A) $\frac{1}{6}$
B) $\frac{1}{4}$
C) $\frac{1}{2}$
D) $\frac{2}{3}$



58 A set of equivalent fractions for $\frac{5}{6}$ is

A) $\frac{11}{12}, \frac{15}{18}, \frac{19}{24}$
B) $\frac{10}{12}, \frac{20}{24}, \frac{25}{36}$
C) $\frac{10}{12}, \frac{12}{18}, \frac{20}{24}$
D) $\frac{10}{12}, \frac{15}{18}, \frac{20}{24}$

59 The improper fraction $\frac{23}{5}$ when written as a mixed number is

A) $4\frac{3}{5}$
B) $4\frac{2}{5}$
C) $5\frac{3}{5}$
D) $2\frac{3}{5}$

60 Which of the following is **TRUE**?

A) $\frac{2}{5} < \frac{3}{10}$

B) $\frac{2}{5} = \frac{3}{10}$

C) $\frac{2}{5} > \frac{3}{10}$

61 $5\frac{2}{3}$ when written as an improper fraction is

A) $\frac{15}{3}$

B) $\frac{16}{3}$

C) $\frac{17}{3}$

D) $\frac{11}{3}$

62 35% is the same as

A) $\frac{35}{1000}$

B) $\frac{35}{100}$

C) 35

D) 3.5

63 In a class of 20 students, there are 9 girls and 11 boys. The ratio of boys to girls is

A) 9:11
B) 9:20
C) 11:20
D) 11:9

64 The sum of $\frac{3}{7} + \frac{2}{7}$ is

A) $\frac{5}{14}$

B) $\frac{5}{7}$

C) $\frac{6}{7}$

D) $\frac{10}{49}$

65 The sum of $4\frac{2}{3} + 2\frac{1}{5}$ is

A) $6\frac{8}{15}$

B) $6\frac{3}{8}$

C) $6\frac{13}{15}$

D) $7\frac{2}{15}$

66 **Add:**

$$\begin{array}{r} 10\frac{2}{5} \\ +12\frac{1}{4} \\ \hline \end{array}$$

A) $22\frac{13}{20}$

B) $22\frac{1}{3}$

C) $22\frac{3}{20}$

D) $22\frac{1}{0}$

67 Johnny had a bag of 36 candies. He ate $\frac{1}{3}$ of them himself and Betsy ate $\frac{1}{4}$ of them. In all, how many candies were eaten?

A) 21 candies
B) 24 candies
C) 28 candies
D) 30 candies

68 **Subtract:** $\frac{7}{8} - \frac{1}{4} =$

A) $\frac{6}{4}$

B) $\frac{6}{8}$

C) $\frac{8}{8}$

D) $\frac{5}{8}$

69 $8 - \frac{1}{3} =$

A) $7\frac{2}{3}$

B) $8\frac{2}{3}$

C) $7\frac{1}{3}$

D) $\frac{7}{3}$

70 Joan had 2 pizzas to share with her friends. Together they ate $1\frac{3}{8}$ pizzas. How much did they have left over?

A) $1\frac{5}{8}$ pizzas

B) $\frac{5}{8}$ pizza

C) $\frac{3}{8}$ pizza

D) $\frac{3}{4}$ pizza

71 $3 \times \frac{5}{8} =$

A) $3\frac{5}{8}$

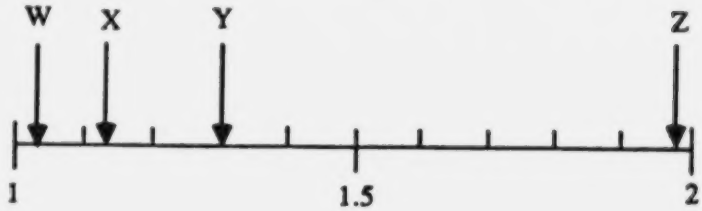
B) $\frac{5}{24}$

C) $\frac{5}{23}$

D) $1\frac{7}{8}$

72 Which arrow points to the number 1.03?

A) W
B) X
C) Y
D) Z



(73) 0.04 + 0.005 + 0.2 =

A) 0.11
B) 0.452
C) 0.254
D) 0.245

(74) **Subtract:**

$$\begin{array}{r} 5.04 \\ -\ \underline{4.23} \end{array}$$

A) 1.81
B) 0.81
C) 1.21
D) 1.27

(75) Mr. Jones bought paint for $48.50, brushes for $18.95, and sandpaper for $1.39. If he gave the cashier $70.00, how much change should he get?

A) $11.26
B) 2.16
C) 1.14
D) 1.16

(76) **Subtract:** 286.5 - 0.315 =

A) 2.550
B) 286.215
C) 286.185
D) 255.0

(77) **Multiply:** 23.52 x 0.06 =

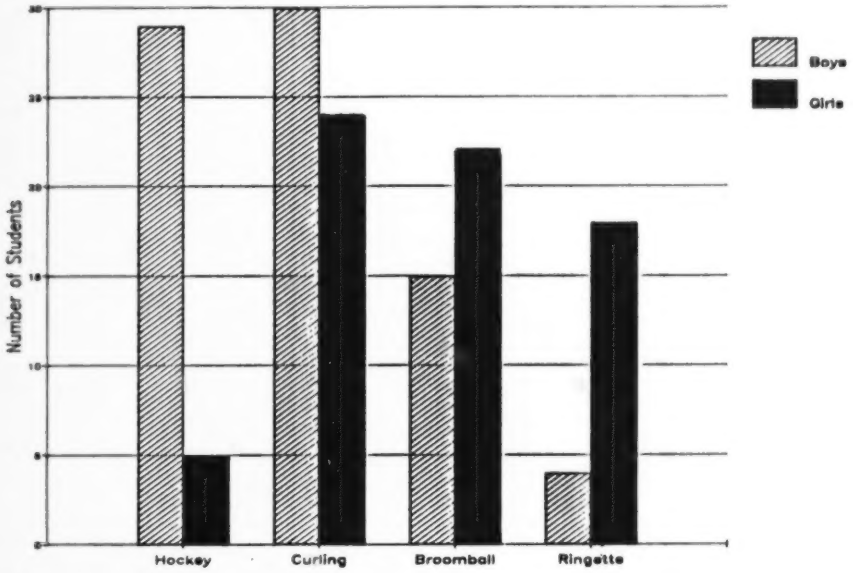
A) 0.14112
B) 1.4112
C) 14.112
D) 14112

78 **Multiply:** 5600 x 0.01 =

A) 56
B) 560
C) 5600
D) 56 000

The next two questions refer to the graph shown below.

Sports Day Selections in Grey Owl School



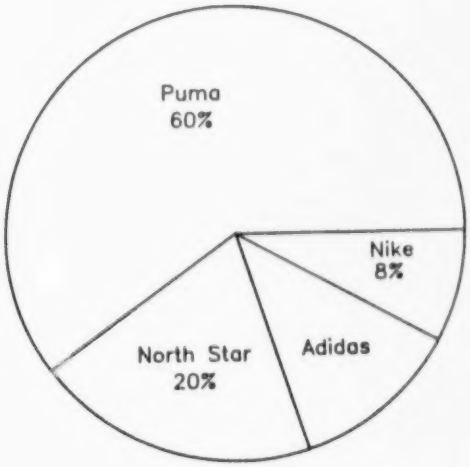
79 In which sport did girls outnumber boys by 7?

A) Hockey
B) Curling
C) Broomball
D) Ringette
E) None of these

80 Which sport was chosen by only 4 boys?

A) Hockey
B) Curling
C) Broomball
D) Ringette
E) None of these

The next 3 questions refer to the graph shown below.



The graph above shows the brand names of runners worn by the boys in Jonesdale School.

81 What percent of the boys wear Pumas?

A) 12%
B) 20%
C) 60%
D) 8%

82 What percent of the boys wear Adidas?

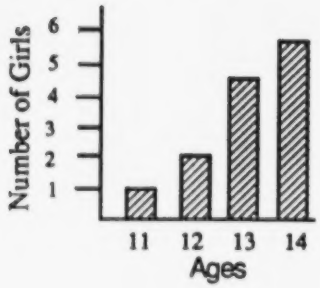
A) 8%
B) 10%
C) 12%
D) None of these

83 Which brand of runners was worn by the fewest boys?

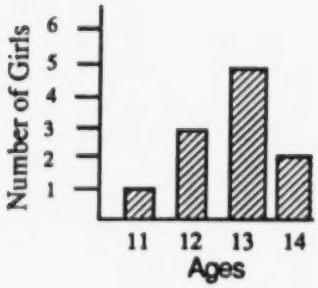
A) Nike
B) Adidas
C) North Star
D) Puma

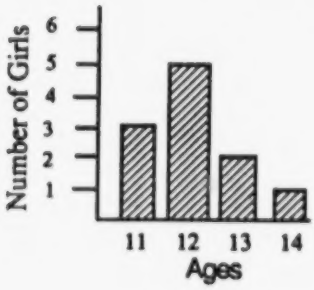
84 In Mr. Jones' grade 6 class, the eleven girls have the following ages: 14, 13, 13, 12, 12, 12, 12, 12, 11, 11, 11.

Which bar graph shows this information?

A)


B)

C)


D)


Read this problem situation in order to answer question 85.

Gordon and Bob are planning to get new T-shirts for the local team which they coach. They will need to get one for each of the 12 team members and 6 extras. The shirts cost $7.00 each. How much will they have to spend?

85 Which operation, or operations, are needed to solve this problem?

A) First multiplication, then subtraction
B) Only multiplication
C) First addition, then multiplication
D) Only addition

86

Alex, Bob and Cheryl all live on the same road. Alex lives 10 km from Bob. Cheryl lives 3 km from Bob. How far does Cheryl live from Alex?

A) 10 km
B) either 13 km or 7 km
C) both 13 km and 7 km
D) 13 km
E) 7 km

The next two questions deal with the following problem:

Jill and Jack set out on a hike of 15 kilometres. For lunch they brought along 5 sandwiches. They ate their lunch at 12:30 after walking 9 km. How many kilometres did they hike after lunch to get to the end of the trail?

87 In this problem, which information is NOT needed in order to find the answer?

A) 15 km <u>and</u> 9 km
B) 9 km
C) 12:30
D) 5 sandwiches
E) 12:30 <u>and</u> 5 sandwiches

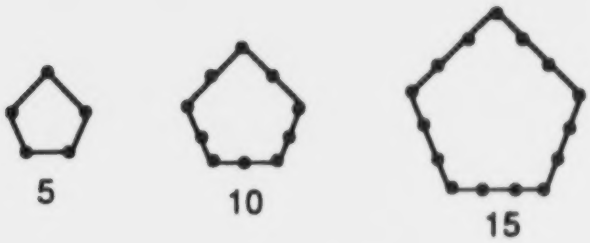
88 Which of the following is the best method to solve this problem?

A) Act it out
B) Look for a pattern
C) Guess and check
D) Draw a diagram and label it

89 If 8 dishes of tiger food are set out 10 m apart, what is the shortest distance a hungry tiger would have to travel to eat all the food starting at the first dish?

A) 100 m
B) 90 m
C) 80 m
D) 70 m
E) 18 m

Here are the first three of a series of pentagons. The number under each pentagon indicates the number of dots it contains.



90 For a pentagon containing 30 dots, how many dots should there be on each side of the figure?

A) 5
B) 6
C) 7
D) 8

THE END

IF YOU FINISH BEFORE THE TIME IS UP, YOU MAY GO BACK OVER ANY PART OF THE TEST.

MATHEMATICS ASSESSMENT PROGRAM 1987

GRADE 6

MANUAL AND SCORING KEY

MAY, 1987

Manitoba Education

SE 050151

GENERAL TESTING INSTRUCTIONS

1. Please read all instructions carefully before administering the test.

2. Actual test writing time is 90 minutes. The test contains 90 items.

3. Writing should occur in two blocks of time: 45 minutes for Part A and 45 minutes for Part B. There should be a break of 10 to 15 minutes between the writing of the two parts. All testing must be completed during one morning: **either May 26 or 27**.

4. Students should be asked to bring reading or study material with them to use when they complete the test. Some may finish the test before the end of the allotted time.

5. Students will respond to the test on separate answer sheets. An extra copy of this answer sheet is provided with the manual.

6. Detailed instructions for administering the test appear on pages 3-4 of the Manual.

7. Students must use pencils for answering the questions. Ball point pens must NOT be used.

8. No calculators or rulers are permitted during the test. Inform students of this if necessary. Scratch paper is permitted.

9. You may pronounce a word for a student but you should not explain the meaning, or provide any other assistance in clarifying questions.

10. There is no penalty for guessing. Students may guess if they are not completely sure of the right answer.

Test Format

The entire testing process requires approximately 2 hours to complete, including:

a) 10-15 minutes administration time
b) 45 minutes - Part A
c) 10-15 minutes break
d) 45 minutes - Part B

Materials

1. Grade 6 Manual and Scoring Key
2. Student test booklets
3. Answer sheets
4. Soft lead pencils, and erasers - school supplied

(This appears as page 1 in the student test booklet.)

THERE ARE THREE EXAMPLES. TRY THEM AND PUT YOUR ANSWERS IN THE SAMPLE ANSWER SHEET BELOW. THE FIRST ONE IS DONE FOR YOU.

IF YOU WANT TO CHANGE AN ANSWER, ERASE THE FIRST ANSWER COMPLETELY AND BLACKEN IN THE CORRECT ONE.

194 The sum of 126 and 85 is

A) 101
B) 111
C) 211
D) 311

195 A square has _____ sides.

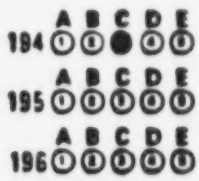
A) five
B) four
C) three
D) two

196 The <u>largest</u> of these number is

$1\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$ $1\frac{1}{2}$

A) $1\frac{1}{4}$
B) $\frac{1}{3}$
C) $\frac{1}{2}$
D) $\frac{1}{4}$
E) $1\frac{1}{2}$

SAMPLE ANSWER SHEET



STOP PLEASE DO NOT TURN THE PAGE UNTIL ASKED TO DO SO.

ADMINISTERING THE TEST

1. Describe the nature and length of the test and the testing procedure to the students. Include in your description the following:

   Students in grade 6 in Manitoba are writing this mathematics test today. The purpose is to find out how well grade 6 students are learning important ideas and skills in mathematics. The results of this survey will be used to help improve mathematics in Manitoba schools. Depending on your mathematics background, the questions in this test may be easy or they may be difficult. Regardless of the mathematics you have had, it is important that you try each question.

READ ALOUD

The test is in two parts, each requiring 45 minutes. A short break will be given after completion of Part A. If you finish Part A before the time is up, you may use the remaining time to go back over your work.

2. Ensure that desks are cleared. If necessary, inform students that they may not use calculators or rulers.

3. Each student should have at least one sharpened lead pencil and an eraser. You may provide scratch paper.

4. Pass out the answer sheets. Instruct students to:

   - Print their names in the boxes provided at the top left corner of Side 1. Do not have them blacken the circles underneath the letters.

   - Blacken the appropriate circles for sex and grade.

5. Instruct students not to open their test booklets until told to do so. Pass out test booklets. Instruct students to print their name and other information on the inside front cover.

6. Each test booklet has a unique booklet number. Instruct students to print their test booklet numbers in the "Identification Number" boxes A-E of the answer sheet and to blacken the appropriate circles. Please ensure that this has been done correctly.

7. Each school has a unique 4-digit school code. Your school code is with your testing materials. Instruct students to write this code in the "special codes" boxes K-N of the answer sheets and to blacken the appropriate circles. Please verify that all students have done this correctly.

READ ALOUD

> **All answers are to be marked on your answer sheet. Blacken the circle on the answer sheet that corresponds to your answer. If you wish to change an answer, be sure to erase completely your first answer. Try your best on each question even if you are not completely sure. If you finish PART A before the time is up, use the remaining time to go over your work.**

8. Have students turn to the sample test items on page 1 and answer them on the sample answer sheet at the bottom of the page. Go over these responses with the students, being sure that they have answered correctly. Answer any student questions.

9. Have students turn to page 2 of the test booklet and begin. Note the starting time. (Please check to see that students are on the appropriate part of the answer sheet.)

10. After exactly 45 minutes -

READ ALOUD

> **STOP. Put down your pencil and place your answer sheet inside the test booklet.**

Give students and yourself a short break before beginning Part B.

11. After the break -

READ ALOUD

> **We will now do PART B. If you finish Part B before the time is up, you may go back over any part of the test. Take out your answer sheet and find space 51. Now open your test booklet to page 14 where it says "PART B" and begin working with question 51.**

Note the starting time and check to see that students are on the appropriate part of the answer sheet.)

12. At the end of exactly 45 minutes of testing time for PART B, instruct students to STOP writing. Collect all answer sheets and test booklets.

13. If you wish to retain a record of those students whose papers are returned for the provincial sample, please make a copy for your use. (Hand copy on the NCS answer sheet for computer scoring.) Booklets may be retained by the school for future use.

14. For the provincial sample only, you are to return the front cover of the test booklet along with the students' NCS answer sheet. Return mailing instructions have been sent to principals.

SCORING

It is recommended that the tests be scored according to clusters of items, or subtests. Subtest scores are more meaningful than a total test score. For each item the scoring key on the next page indicates:

1) the correct answer

2) the subtest to which the item belongs.

Subtests		Item Numbers
I.	Number Systems, Operations, and Properties	
I.1	Place Value, Regrouping, and Rounding Off	1-8
I.2	Equalities and Inequalities	9-12
I.3	Factors and Primes and Composite Numbers	13-16
I.4	Properties	17-20
I.5	Addition and Subtraction of Whole Numbers	21-27
I.6	Multiplication of Whole Numbers	28-32
I.7	Division of Whole Numbers	51-56
I.8	Fractions and Percent	57-63
I.9	Operations with Fractions	64-71
I.10	Operations with Decimals	72-78
II.	Measurement	33-41
III.	Geometry	42-50
IV.	Graphing	79-84
V.	Problem Solving	85-90
VI.	Word Problems	24,56,67,70, 75,85-87,88*,89,90

A separate overlapping category "Word Problems" may also be treated as a subtest. It includes items of a problem nature from several of the above subtests. Thus you may wish to determine performance in this category.

*Note that item 88 is not to be included in the total subtest score for Problem Solving. While response D to this item may be considered the best answer, it is recognized that there is no one way to solve a word problem.

SCORING KEY - GRADE 6

Item Number	Correct Answer	Subtest	Item Number	Correct Answer	Subtest
1	B	I.1	51	B	I.7
2	D	I.1	52	D	I.7
3	B	I.1	53	B	I.7
4	B	I.1	54	B	I.7
5	B	I.1	55	D	I.7
6	D	I.1	56	C	I.7
7	C	I.1	57	B	I.8
8	A	I.1	58	D	I.8
9	C	I.2	59	A	I.8
10	C	I.2	60	C	I.8
11	D	I.2	61	C	I.8
12	A	I.2	62	B	I.8
13	D	I.3	63	D	I.8
14	A	I.3	64	B	I.9
15	A	I.3	65	C	I.9
16	D	I.3	66	A	I.9
17	A	I.4	67	A	I.9
18	C	I.4	68	D	I.9
19	B	I.4	69	A	I.9
20	B	I.4	70	B	I.9
21	D	I.5	71	D	I.9
22	D	I.5	72	A	I.10
23	C	I.5	73	D	I.10
24	A	I.5	74	B	I.10
25	D	I.5	75	D	I.10
26	B	I.5	76	C	I.10
27	B	I.5	77	B	I.10
28	B	I.6	78	A	I.10
29	A	I.6	79	C	IV
30	D	I.6	80	D	IV
31	B	I.6	81	C	IV
32	B	I.6	82	C	IV
33	A	II	83	A	IV
34	B	II	84	D	IV
35	A	II	85	C	V
36	C	II	86	B	V
37	C	II	87	E	V
38	E	II	88*	D*	V*
39	A	II	89	D	V
40	A	II	90	C	V
41	C	II			
42	C	III			
43	D	III			
44	B	III			
45	C	III			
46	C	III			
47	C	III			
48	D	III			
49	A	III			
50	B	III			

*Not included in subtest score since more than one answer may be feasible.

Score reporting grid for local scoring on next page.

MATHEMATICS ASSESSMENT PROGRAM 1987
FINAL TEST SCORES - GRADE 6

Subtests and Number of Items per Subtest:

Student Names	Number Systems, Operations, and Properties										Measure-ment	Geometry	Graphing	Problem Solving	Word Problems
	I.1 8	I.2 4	I.3 4	I.4 4	I.5 7	I.6 5	I.7 6	I.8 7	I.9 8	I.10 7	II 9	III 9	IV 6	V 5	VI 10